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REMARKS

The Applicants respectfully request reconsideration of this application in view of the above amendments and the following remarks.

Claim Objections

The Examiner has objected to claims 1-9 and 14.

Applicants respectfully submit that objection is moot in view of the amendments above.

35 U.S.C. §103(a) Rejection – Takemura and Sun

The Examiner has rejected claims 1-5, 7 and 10-14 under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent No. 5,759,739 issued to Takemura et al. (hereinafter referred to as "Takemura") in view of U.S. Patent Application Publication No. 2005/0074699 issued to Sun et al. (hereinafter "Sun"). These claims have been cancelled without prejudice. The Applicants respectfully submit that the presently pending claims are allowable over Takemura and Sun.

Claim 21 recites a method comprising:

"depositing a layer on a substrate;

depositing a non-chemically amplified photoresist layer upon the layer, the non-chemically amplified photoresist layer having a developer-soluble resin and a photoactive compound, the photoactive compound inhibiting solubility of the developer-soluble resin;

exposing selected portions of the non-chemically amplified photoresist layer to an extreme ultra-violet light source such that solubility of the selected portions of the non-chemically amplified photoresist layer is promoted; and

developing the exposed portions of the non-chemically amplified photoresist layer".

Atty Docket No. 42P17301
Application No. 10/687,288

5

Accordingly, claim 21 pertains to a method of using a non-chemically amplified photoresist layer that includes a developer-soluble resin and a photoactive compound that inhibits the solubility of the developer-soluble resin.

On page 6 of the present office action, under the section Response to Arguments, the Examiner has asserted "*Although Takemura and Cathey does not refer to the resist layer as non-chemically amplified, both Takemura and Cathey teach a resist layer that has the same components of the resist layer recited in claims 1, and 10. Sun is merely depended upon to disclose the interchangeability and/or replaceability of a chemically amplified with a non-chemically amplified resist layer*".

As understood by Applicants, Sun discusses that a non-chemically amplified photoresist may be used instead of an ever troubling chemically amplified photoresist. This means that a **whole** non-chemically amplified photoresist may be used instead of a **whole** chemically amplified photoresist. The Examiner seems to be incorrectly interpreting the section of Sun relied upon to mean that the **components** of the chemically amplified resists discussed in Takemura would be useful as a non-chemically amplified resist composition. However, the section of Sun relied upon does not teach or suggest this but merely discusses that "*due to the extraordinarily thin photoresist, this invention opens an opportunity to replace the ever troubling chemically amplified photoresist with non-chemically amplified photoresists for the photolithography process of KrF or shorter wavelengths.*"

Accordingly, neither Sun nor Takemura teaches or suggests a non-chemically amplified photoresist layer that includes a developer-soluble resin and a photoactive compound that inhibits the solubility of the developer-soluble resin. Furthermore, neither reference teaches or suggests the desirability of such a composition.

Accordingly, claim 21 and its dependent claims are believed to be allowable over Takemura and Sun, which combination is not admitted to be appropriate.

Independent claim 30 and its dependent claims are believed to be allowable for one or more similar reasons.

35 U.S.C. §103(a) Rejection – Cathey and Sun

The Examiner has rejected claims 1, 6-7, 10 and 15 under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent No. 5,358,599 issued to Cathey et al. (hereinafter referred to as “Cathey”) in view of Sun. These claims have been cancelled without prejudice. The Applicants respectfully submit that the presently pending claims are allowable over Cathey and Sun.

Cathey and Sun do not teach or suggest the limitations of independent claim 21. In particular, Cathey and Sun do not teach or suggest a non-chemically amplified photoresist layer that includes a developer-soluble resin and a photoactive compound that inhibits the solubility of the developer-soluble resin. Furthermore, neither reference teaches or suggests the desirability of such a composition.

Furthermore, claim 21 recites in part “*exposing selected portions of the non-chemically amplified photoresist layer to an extreme ultra-violet light source such that solubility of the selected portions of the non-chemically amplified photoresist layer is promoted*”. As understood by Applicants, there is no teaching or suggestion that the resists in Cathey would be suitable for an extreme ultra-violet light source.

Accordingly, claim 21 and its dependent claims are believed to be allowable over Cathey and Sun, which combination is not admitted to be appropriate.

Independent claim 30 and its dependent claims are believed to be allowable for one or more similar reasons.

35 U.S.C. §103(a) Rejection – Cathey, Sun and Zang

The Examiner has rejected claims 8 and 9 under 35 U.S.C. §103(a) as being unpatentable over Cathey in view of Sun as applied to claims 1, 6-7, 10 and 15, above, and further in view of U. S. Patent Application Publication No. 2004/0204328 issued to Zhang et al. (hereinafter "Zhang"). The Applicants respectfully submit that the present claims are allowable over Cathey, Sun and Zhang.

As discussed above, Cathey and Sun do not teach or suggest the limitations of the independent claims. Zhang does not remedy what is missing from Cathey and Sun. Accordingly, the independent claims and their respective dependent claims, are believed to be allowable over Cathey, Sun and Zhang. At this time, Applicants elect not to address other aspects of the rejection of these dependent claims.

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Conclusion

In view of the foregoing, it is believed that all claims now pending patentably define the subject invention over the prior art of record and are in condition for allowance. Applicants respectfully request that the rejections be withdrawn and the claims be allowed at the earliest possible date.

Request For Telephone Interview

The Examiner is invited to call Brent E. Vecchia at (303) 740-1980 if there remains any issue with allowance of the case.

Request For An Extension Of Time

The Applicants respectfully petition for an extension of time to respond to the outstanding Office Action pursuant to 37 C.F.R. § 1.136(a) should one be necessary. Please charge our Deposit Account No. 02-2666 to cover the necessary fee under 37 C.F.R. § 1.17 for such an extension.

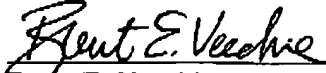
Charge Our Deposit Account

Please charge any shortage to our Deposit Account No. 02-2666.

Respectfully submitted,

BLAKELY, SOKOLOFF, TAYLOR & ZAFMAN LLP

Date: 12/27/06



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Atty Docket No. 42P17301
Application No. 10/687,288